DOCUMENT RESUME

ED 222 568 TM 820 729

AUTHOR Hughes, Honore M.; Leatherman, Martha K.
TITLE Refinement of the Maryland Preschool Self-Concept Scale.
PUB DATE Aug 82
NOTE 22p.; Paper presented at the Annual Meeting of the American Psychological Association (Washington, DC, August 1982).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Item Analysis; Preschool Education; *Preschool Tests; Psychometrics; Research Problems; Self Concept; *Self Concept Measures; Test Construction; *Test Reliability; Test Reviews; Young Children
IDENTIFIERS *Maryland Preschool Self Concept Scale

ABSTRACT

This manuscript is a report of the third revision of the Maryland Preschool Self-Concept of Scale originally developed by Smith (1977). Two samples of 4-, 5-, and 6-year old children (N = 54 and N = 78) were administered the Maryland Preschool Self-Concept Scale - Revised (MPSS-R). In the first study, the measure was given twice, 3 to 5 weeks apart; during the second testing session the Peabody Picture Vocabulary Test-Revised (PPVT-R) was also administered in a counterbalanced order. The MPSS-R, the PPVT-R, the Young Children's Social Desirability Scale (YCSDS) and the McDaniel-Piers Young Children's Self Concept Scale were administered in the second investigation, with no retesting. In addition, teachers completed an Inferred Self-Concept Scale for each of their children. The results of the two studies indicate that, while the MPSS-R shows promise as a scale to be used for research purposes, it is in need of further revision. While its internal consistency and item-total correlations are minimally sufficient for research instruments, improvement in its psychometric properties is necessary in order to be able to utilize it with greater confidence. (Author/PN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED222568

Refinement of the Maryland Preschool Self-Concept Scale

Honore M. Hughes and Martha K. Leatherman

University of Arkansas

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

H. M. Hughes

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TM 820725

Paper presented at the annual meeting of the American Psychological Association, Washington, D.C., August, 1982.

Abstract

This manuscript is a report of the third revision of the Maryland Preschool Self-Concept Scale originally developed by Smith (1977). Two samples of 4, 5, and 6 year old children (N = 54 and N = 78) were administered the Maryland Preschool Self-Concept Scale - Revised (MPSS-R). In the first study, the measure was given twice, 3 to 5 weeks apart; during the second testing session the PPVT-R was also administered in a counterbalanced order. The MPSS-R, the PPVT-R, the Young Children's Social Desirability Scale (YCSDS) and the McDaniel-Piers were administered in the second investigation, with no retesting. In addition, teachers completed an Inferred Self-Concept Scale for each of their children. Results from the first study indicated that there was no correlation between the MPSS-R and the PPVT-R; test-retest stability was r = .52. The psychometric properties of the instrument at the first and second administrations were examined. The internal consistency was found to be minimally sufficient for a research instrument; the item-total correlations indicated that there was a great deal of variability between administrations in the adequacy of the items. In the second investigation the MPSS-R scores were found to correlate with social desirability to a slight extent and with PPVT-R scores and age to a moderate degree. The correlations of the measures with the McDaniel-Piers followed the same general pattern. No correlations among the three measures of self-esteem were noted. The internal consistency of each of the instruments was found to be fairly good, with the evidence for the Inferred, the McDaniel-Piers, and the YCSDS somewhat stronger. Again, much variability was noted in the item-total correlations for the MPSS-R. While the MPSS-R was judged to be adequate for use as a research instrument, suggestions for further improvements were made.

Refinement of the Maryland Preschool Self-Concept Scale

In the past two decades, psychologists and educators have become increasingly interested in self-concept or self-esteem as an important socioemotional variable, one which is important to the developmental and learning process (Shavelson, Hubner & Stanton, 1976; Walker, 1973; Wylie, 1974). While there are a number of measures of self-concept/esteem for older children (e.g., see Coppersmith, 1981; McDaniel & Leddick, 1978; Piers, 1969), there are very few well-constructed tests available for children between the ages of 3 and 6 years. Measurement in this area is full of methodological complexities based both upon the difficulty of investigating the construct of self-concept/esteem (Wylie, 1974) and upon the problems of measuring personality and socioemotional attributes of preschool children (Walker, 1973). In a number of reviews of the area, the most prevalent criticism noted is that investigators need to utilize instruments which are developed from a coherent theory and definition, have known psychometric properties, and are widely used (Crandall, 1973; Shavelson et al., 1976; Walker, 1973; Wells & Marwell, 1976; Wylie, 1974). Additionally, the particular characteristics and capabilities of very young children (e.g., verbal skills, conformity to social demands, egocentricity, attention span, instability of responses, test-taking skills) must be taken into consideration (Smith, 1977; Walker, 1973).

Coller and Guthrie (1971) and Walker (1973) describe 17 different measures of self-concept/esteem which were developed for preschool children, of which only three have been published or are available commercially. Most of them are semi-projective in nature, without an objective scoring format. Nearly all have had little psychometric work completed with them, with meager evidence presented for their reliability and validity. This manuscript describes the third revision of a self-esteem measure which was developed expressly for preschool children in order to address some of the previously discussed measurement difficulties.

The Maryland Preschool Self-Concept Scale (MPSS) was designed as an objective test, easily administered and scored, which was appropriate for the developmental level of this age group. The following criteria were utilized by Smith (1977) in its original development: a) practice items precede the scored items, b) items are administered orally and do not require a verbal response, c) items contain as few words as possible (5-10 per item), and d) items are presented with stimulus cards in order to attenuate problems of response set. In the initial investigations of the psychometric properties of the instrument the MPSS was found by Smith to exhibit a minimally sufficient level of reliability as assessed by the Spearman-Brown prophecy formula. Hughes (Note 1) then conducted a series of investigations in an attempt to improve the measure.

In the first study conducted by Hughes, item analyses of the 35-item test were conducted using a Pearson correlation, and the items which correlated at least .50 with the total score were identified. Internal consistency estimates as measured by coefficient alpha for two administrations were .70 and .77. For the second study, two new forms of the MPSS were constructed, retaining only 12 of the original items. A new pool of items was developed, with some of the questions modified from the McDaniel-Piers Young Children's Self-Concept Scale (McDaniel & Leddick, 1978), and others constructed following the recommendations of Keller, Ford, and Meacham (1978). It was the author's and the examiner's impression that the questions in the MPSS were limited in terms of tapping areas relevant to a preschool child's self-concept, and according to Keller et al., the test was too heavily weighted with items pertaining to the domains of academic self-esteem and peer relationships. New items were selected for the two forms which assessed the areas of a) action-competence, b) physical appearance, c) social-peers, d) home-parents, e) school and behavior, and f) emotions-feelings; each form contained thirty six pairs of questions covering generally comparable areas.

The results from the second study indicated that the internal consistency of both 35-item forms was substantially higher: coefficient alpha was .90 and .93 The 3-4 week test-retest stability of the total scores was .54. Utilizing Pearson correlations, items on each form which had the highest correlation with the total score were identified and retained. Based upon the item analysis, a new 25-item instrument was constructed; the shorter length was chosen in an attempt to eliminate the difficulties with attention span some of the children experienced. The psychometric properties of this revised measure were investigated in the third and fourth studies reported herein. In the third study the relationship between vocabulary skills was also examined since previous studies had suggested that level of self-esteem may be related to such skills (Bridgeman & Shipman, 1978; Walker, 1973). Several additional measures were included in the fourth investigation. Two additional self-esteem scales, one a self-report and the other a teacher-report, were employed in a preliminary evaluation of the construct validity of the MPSS-R. An instrument to assess childrens' tendencies to respond in a socially desirable manner was also given, since preschoolers are prone to try and please adults (Walker, 1973), and self-esteem instruments are especially susceptible to the influence of socially desirable responding (Arlin, 1976). Of secondary interest in the fourth study was an examination of the psychometric properties of the three self-esteem measures and the social desirability scale.

Method

Subjects

The 54 children in the third study were from four different preschools: two private preschools, plus a nursery school and a kindergarten class which were associated with the local university. The socioeconomic level of the 25 males and 29 females was estimated to be within the middle-class range. The children ranged in age from 4 to 6½ years and were grouped into age categories based on

their age at the time of testing. For the fourth study, the 78 children attended a different private preschool; the socioeconomic level of this sample of children was estimated to be middle to upper-middle class. Age groupings for these 42 males and 36 females were formed in the same way as in the third study.

Measures

Maryland Preschool Self-Concept Scale - Revised (MPSS-R). The MPSS-R is a revision of the original measure developed by Smith (1977) whose theoretical underpinnings are founded upon the definition of self-concept proposed by Coller (1971). Coller described the self-concept as involving aspects of self-description and self-evaluation, and concluded that any statement a person makes which includes those two facets would be indicative of that person's self-concept. The administration procedure calls for the children to be shown four stimulus cards on which are two stick figures. One figure is holding a flag and is referred to as the "flag-child"; the other figure is holding a balloon and is called the "balloon-child". After a child has received the standard instructions[1], each figure is described in terms of characteristics, traits, or feelings, and the child is asked which figure is most like him or herself. For example, an examiner would say "The balloon child is happy; the flag child is sad. Which one is most like you?" In response the child may answer verbally or point. On the four stimulus cards the order of the stick figure and the color of the balloon and flag vary (i.e., on two cards the flag-child appears on the left, with the flag colored red once and green on the other card). In order to attenuate response set tendencies, each item is accompanied by one of the four illustrations, with the cards kept in a pile in a random order.

Five "buffer" items precede the test itself, the formats of which are identical to the actual test items. They serve as training questions in that they ask the child to respond to obvious facts (e.g., child has hands or feet) which can

be verified by the examiner, rather than to statements whose answers are purely subjective on the part of the child. The purpose of these initial items is to make certain that the child understands the procedure and requirements of the task. Following those are 20 paired statements which describe opposing personal attributes such as weak-strong, children like him/her - don't like him/her. The child receives 1 point for each positive attribute chosen, not counting the buffer items; the number of positive responses are summed to obtain the total score which ranges from 1 to 20.

Peabody Picture Vocabulary Test - Revised (PPVT-R). The PPVT-R (Dunn & Dunn 1981) is a measure of receptive vocabulary which has been well standardized, with adequate norms, reliability and validity (Sattler, 1982). For this task the children were shown a card with four black and white drawings on it and were asked by the examiner to point to the picture which best illustrates the word he stated. PPVT-R protocols were scored according to the manual; the raw scores, percentiles and standard scores were recorded.

Young Children's Social Desirability Scale (YCSDS). The YCSDS is a 26-item, forced choice questionnaire constructed by Ford and Rubin (1970) to assess preschoolers' motivation to comply with social demands. Each item is composed of a pair of questions which are literal opposites of each other (e.g., always listen to parents - sometimes not listen). The items refer to behaviors which are either culturally approved but infrequent in occurrence, or culturally disapproved but frequent in occurrence. The child obtains a high score by claiming culturally approved characteristics and disclaiming culturally disapproved behaviors. Within the forced-choice format the child is required to respond with some of the essential words used in the item in order for the examiner to score the response. Two "warm-up" items which consist of questions without marked social desirability connotations (e.g., never play with toys - sometimes play) precede the 26 scored items. Each item answered in a socially desirable direction receives one point; scores range from 1 to 26 with higher scores indicating greater

tendencies to endorse socially desirable behaviors. Reliability and validity estimates on three samples of preschool children (N = 437 combined) reported by Ford and Rubin provided strong evidence for the scale's psychometric adequacy for 4 and 5 year olds.

Inferred Self-Concept Scale. This scale is a 30-item teacher report measure designed by E. L. McDaniel (1973). Each of the descriptive statements is rated on a 5-point scale ranging from "never" to "always"; all items are scored in the affirmative direction. Eight of the statements are worded so that they are rated in the reverse direction in order to avoid a response set. Total scores are obtained by summing the numerical values assigned to each item by raters; totals range from 30 to 150. McDaniel reports reliability and validity data for 180 children grades 1-6; Hughes (Note 2) presents reliability data for a sample of preschoolers which indicate that the measure has adequate reliability for young children also.

McDaniel-Piers Young Children's Self-Concept Scale. The McDaniel-Piers is a 40-item measure developed by McDaniel (1973) which is an extension downward in age (to grades 1-3) of the Piers-Harris Children's Self-Concept Scale (Piers, 1969). The measure is administered either individually or in small groups, with the examiner reading the descriptive statements to the children. Each child responds by circling "yes" or "no" on his/her answer sheet. The scale provides for four scores: a Total Score, Feeling Self, School Self, and Behaving Self Subscales. Scores are obtained by summing the responses which are answered in the direction which indicates high self-esteem; they range from 0 to 40. McDaniel and Leddick (1978) and Johnson (1976) report normative and adequate reliability data; little validity information is available.

Procedures

Children were tested individually in a small room near their classroom. In the third study a male examiner administered the MPSS-R during the first session,

then returned 3-5 weeks later and gave the PPVT-R and MPSS-R in a counterbalanced order. Three testing sessions were necessary for the fourth study, with all instruments being administered within a 10-day period. A female examiner gave the PPVT-R, and the male examiner administered the MPSS-R plus the social desirability measure during the same testing session in a counterbalanced order; he also gave the McDaniel-Piers on another day. The order of the instruments given within the ten-day period varied randomly.

Results

Data from the third study indicated that test-retest stability of the MPSS-R was .52, and that there was no correlation between the PPVT-R and the MPSS-R. Coefficient alpha's were .63 and .74 for the test and retest. Item analyses conducted by means of a point-biserial item-total correlation revealed that five items on the initial administration correlated with the total score at the .30 level, while 12 items from the second administration did so. As can be seen in Figure 1, there was a substantial amount of variability in the item-total correlations for the same item over the two administrations, and for many of the items, the individual item means were quite high.

Insert Figure 1 about here

Similar results were obtained with the MPSS-R in the fourth study. Item analyses also indicated much variability in the item-total correlation, with little consistency across the three administrations (See Figure 1). Coefficient alpha was .67. The correlations among the measures are presented in Table 1. The scores on the MPSS-R were highly negatively skewed since the preschoolers obtained uniformly high scores (M = 17.6, SD = 2.2); therefore before using those scores in correlational analyses they were "normalized": transformed into percentiles then converted to normalized standard scores (Ghiselli, Campbell &

Zedeck, 1981). The MPSS-R showed a slight correlation with the YCSDS and mod-

---

Insert Table 1 about here

---

erate correlations with the PPVT-R and with age. The McDaniel-Piers correlated with the YCSDS, and the PPVT-R, though to a lesser extent than the MPSS-R; no systematic relationship with age was seen. No relationships among the three measures of self-esteem were noted. The internal consistency of the three self-esteem instruments and the YCSDS was evaluated (see Table 2); coefficient alpha values were found to be quite high, even for the subscales of the McDaniel-Piers,

---

Insert Table 2 about here

---

with the estimate for the MPSS-R somewhat lower. Point-biserial correlational item analyses suggested that with the exception of the MPSS-R, item-total correlations were fairly high, with many at the .40 level or higher. On the Inferred scale 13 of 30 items attained that level, 20 of the 26 items on the YCSDS were that high, 14 of the 40 McDaniel-Piers items correlated .40 or higher, and the MPSS-R had 2 items above that level. Especially impressive was the Feeling self-subscale of the McDaniel-Piers: 8 of the 17 items had correlations of .40.

Exploratory one-way analyses of variance were conducted with the mean scores of the four measures to investigate possible age and sex effects; one sex and two age effects were found. A significant effect of age was found for the MPSS-R scores, $F(2,73) = 5.18$, p .008. (Means and standard deviations for the raw scores were: 4 year olds - 16.6, 2.3; 5 year olds - 18.2, 1.7; 6 year olds - 18.1, 2.3). On the McDaniel-Piers Feeling subscale a significant age effect was also noted, $F(2,75) = 3.21$, p .045 (Means and standard deviations expressed as percentages were : 4 year olds - 71.0, 18.0; 5 year olds - 75.0, 210; 6 year olds - 85.0 13.0). The third self-esteem measure also showed a significant effect due to sex differences, $F(1,76) = 7.99$, p .006 (Males: $M = 118.5$, $SD = 9.8$;

Females: $\underline{M}$ = 125.0, $\underline{SD}$ = 10.8). With the social desirability measure a trend toward a significant effect due to sex was seen, $F(1,76) = 3.11$, $\underline{p}$ .08 (Males: $\underline{M}$ = 16.0, $\underline{SD}$ = 7.4; Females: $\underline{M}$ = 18.8, $\underline{SD}$ = 6.5).

Discussion

The results of the two studies indicate that while the MPSS-R shows promise as a scale to be used for research purposes, it is in need of further revision. While its internal consistency and item-total correlations are minimally sufficient for research instruments (Badia & Runyun, 1982), improvement in its psychometric properties is necessary in order to be able to utilize it with greater confidence. It seems apparent that the shortening of the scale from the 36 items used in the second study to the 25 item measure employed in the third and fourth investigations was too large a step, and the reliability of the instrument suffered. Perhaps a 30-item scale would be a good compromise; plans for such a revision are now underway. Additional items will be added from the two longer forms employed in the second study. The substantial variability in the item-total correlation as well as in the individual item mean scores likely reflects the instability of responding characteristic of children this age, and makes the selection of the "best" items quite difficult. Due to the dichotomous nature of the items, the means are generally quite high, lowering the size of the correlation obtained. A reasonable solution might be to include the individual item means in the selection criteria, and choose items whose means are lower than .90 and whose correlation coefficients are at least .25 on two out of the three administrations[2]. Regarding the measure's test-retest stability, Ghiselli et al. (1981) consider any value higher than .40 to be adequate when evaluating personality characteristics which are dynamic rather than static traits.

The contradictory results related to the correlation between the MPSS-R and PPVT-R are somewhat puzzling, though the lack of correlation found in the third

study may be due to sample-specific differences. Some evidence for that possibility is provided in the literature since a similar measure for preschool children has been found to be related to later cognitive abilities (Bridgeman & Shipman, 1978) and to vocabulary skills (Walker, 1973). The lack of a relationship between the MPSS-R and the McDaniel-Piers suggests that the two self-esteem scales are likely measuring different constructs, which is not unusual in the field of self-esteem measurement (e.g., Drummond & McIntire, 1977; Shavelson et al., 1976; Wylie, 1974). The fact that the Inferred Self-Concept Scale also showed no relation to the other two self-esteem measures was not surprising, given that they were completed by two different sources. Teacher-report instruments frequently show correlations lower than .25 with children reports and constitute relatively poor evidence for (or against) construct validity. Stipeck (1981) also found that 5 and 6 year olds' views of their abilities were quite inaccurate, compared to the teachers' estimations. Reports from teachers should be regarded as a different though equally valid source of information about the child (see Hughes, Note 2 : extended discussion). While a correlation with social desirability of .25 is not substantial, a definite relationship exists whose influence must be considered when assessing self-esteem. Perhaps the safest course to take would be to administer a measure of a child's tendency to respond to social demands at the same time, unless the particular self-esteem scale contained some indicator of social desirability such as a "lie" scale.

The psychometric evaluations of the Inferred Self-Concept Scale, the McDaniel-Piers scale and the YCSDS indicated that they appear to be quite adequate measures for this age group, based upon their internal consistency and item analyses. This finding is especially true for the YCSDS, which is encouraging and important for people working with preschool children to know. Young childrens' tendencies to respond to social demands can be quite reliably assessed with that

instrument. The Inferred scale appears to be an adequate assessment device, though its relationship with socially desirable responding on the part of the reporters is suspect and needs to be evaluated (Hughes, Note 3). The McDaniel-Piers appears to be a good measure for this age group, though caution should be exercised in interpreting the subscales, since McDaniel and Leddick (1978) found evidence for three factors, with only two of the factors corresponding to the established to the subscales. However, until additional populations of children are assessed with the McDaniel-Piers, conclusions regarding its appropriateness for use with preschoolers must be limited to this particular sample of children. The subjects in the fourth study are a select population, having parents who are quite well-educated and have adequate financial resources to send their children to a fairly expensive private preschool. It may be found that for other preschool children, the 40-item scale is too lengthy for their attention span and comprehension.

Conclusions regarding the results of the ANOVAs will have to await replication in order to ascertain whether the age and sex effects found are sample-specific or not. Significant age effects were obtained for the MPSS-R scores for both samples of children reported here, so perhaps that will be a reliable finding with 4 year olds receiving lower scores. However in the earliest investigations of the MPSS with the longer instruments, 4 year olds obtained the highest scores. No reports of age differences on the Feeling subscale have been made previously to this study. The significant differences due to sex on the teacher rating has not been reported elsewhere (McDaniel, 1973); perhaps it is sample-specific or is related to the marginally significant sex effects found in social desirability, though that remains an empirical question. Ford and Rubin (1978) report tendencies of girls to receive higher social desirability scores than boys, though they did not test the difference statistically. It would be an interesting question to investigate further.

Some questions can be raised regarding the construct that the two self-esteem scales are measuring due to their correlations with social desirability and receptive vocabulary. While the McDaniel-Piers' relationship with vocabulary is not substantial, additional investigations of its construct validity are needed, both for this age group and for early elementary school children. As previously noted, the two self-report self-esteem measures seem to be assessing different constructs in this sample, and additional reliability and validity work with the MPSS-R is necessary. Since the MPSS-R correlates with age and vocabulary skills, perhaps it is measuring some maturational factor. Support for this hypothesis is presented by Bridgeman and Shipman (1978) who evaluated a very similar 15-item dichotomously scored instrument for preschool children. They questioned the validity of the construct their scale was measuring and suggested that since it was related to later cognitive abilities of the children, it might actually be a measure of attentiveness at this age. They interpreted the fact that it did not correlate with another measure of self-esteem given at a later time as additional evidence for their hypothesis. Certainly the same hypothesis could be applied to the MPSS-R.

Footnotes

1. Standard instructions and stimulus cards are available from the first author upon request.
2. The 30-item measure will be available in September, 1982.
3. This research was partially supported by funds from Marie Wilson Howells Memorial Research Fund.

Reference Notes

1. Hughes, H. M. Revision and refinement of the Maryland Preschool Self-Concept Scale. Manuscript submitted for publication, 1982.

2. Hughes, H. M. The use of the Inferred Self-Concept Scale with preschool children. Manuscript submitted for publication, 1981.

3. Hughes, H. M. Measures of self-concept and self-esteem for children ages 3-12 years: A brief review and recommendations. Manuscript submitted for publication, 1982.

References

Arlin, M. Causal priority of social desirability over self-concept: A cross-lagged correlation analysis. Journal of Personality and Social Psychology, 1976, 33, 267-272.

Badia, P., & Runyun, R. P. Fundamentals of behavior research. Reading, MA: Addison-Wesley Publishing Co., 1982.

Bridgeman, B., & Shipman, V. C. Preschool measures of self-esteem and achievement motivation as predictors of third grade achievement. Journal of Educational Psychology, 1978, 70, 17-28.

Coller, A. R. The assessment of "self-concept" in early childhood education. Urbana, IL: ERIC Clearinghouse on Early Childhood Education, 1971. (ERIC Reproduction Serivce No. ED 057 910)

Coller, A. R., & Guthrie, P. D. Self-concept measures: An annotated bibliography. Princeton, NJ: Head Start Collection, Educational Testing Service, 1971. (ERIC Document Reproduction Service No. ED 051 305)

Coopersmith, S. Manual for the Self-Esteem Inventories. Palo Alto, CA: Consulting Psychologists Press, Inc., 1981.

Crandall, R. The measurement of self-esteem and related constructs. In J. Robinson and P. Shaver (Eds.), Measures of social psychological attitudes, Ann Arbor, MI: Institute for Social Research, 1973.

Drummond, R. J., & McIntire, W. G. Evaluating the factor structure of "self-concept" in children: A cautionary note. Measurement and Evaluation in Guidance, 1977, 9, 172-177.

Dunn, L. M., & Dunn, L. M. Peabody Picture Vocabulary Test - Revised Manual for Forms L and M. Circle Pines, MN: American Guidance Service, 1981.

Ford, L. H., & Rubin, B. M. A social desirability questionnaire for young children. Journal of Consulting and Clinical Psychology, 1970, 35, 195-204.

Ghiselli, E. E., Campbell, J. P., & Zedeck, S. Measurement theory for the behavioral sciences. San Francisco: W. H. Freeman & Co., 1981.

Johnson, O. G. McDaniel-Piers Young Children's Self-concept Scale. Tests and measurements in child development: Handbook II (Vol. 2). San Francisco: Jossey-Bass, Inc., 1976.

Keller, A., Ford, L. H., & Meacham, J. A. Dimensions of self-concept in preschool children. Developmental Psychology, 1978, 14, 483-489.

McDaniel, F. D., & Leddick, G. R. Elementary children's self-concepts factor structures and teacher ratings. Paper presented at the annual meeting of the American Psychological Association, Toronto, 1978. (ERIC Document Reproduction Service No. ED 175 919)

McDaniel, E. L. Inferred Self-Concept Manual. Los Angeles: Western Psychological Services, 1973.

Piers, E. V. Manual for the Piers-Harris Children's Self-Concept Scale. Nashville, TN: Counselor Recordings and Tests, 1969.

Sattler, J. M. Assessment of children's intelligence and special abilities (2nd ed). Boston: Allyn and Bacon, Inc., 1982.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. Self-concept: Validation of construct interpretations. Review of Educational Research, 1976, 46, 407-441.

Smith, M. I. The development and validation of the Maryland Preschool Self-Concept Scale (Doctoral dissertation, University of Maryland, 1977). Dissertation Abstracts International, 1978, 38, 416. (University Microfilms No. 77-12, 755)

Stipek, D. J. Children's perceptions of their own and their classmates' ability. Journal of Educational Psychology, 1981, 73, 404-410.

Walker, D. K. Socioemotional measures for preschool and kindergarten children. New York: Jossey-Bass, 1973.

Wells, L. E., & Marwell, G. Self-esteem: Its conceptualization and measurement. Beverly Hills: Sage Publications, 1976.

Wylie, R. S. The self-concept (Vol. 1). Lincoln: University of Nebraska Press, 1974.

Table 1

Correlation Matrix for Maryland and McDaniel-Piers Self-Concept Scales

	Age	Sex	MPSS - R	YCSDS	PPVT - R	Inferred	McD-P
MPSS - R	.28(.01)	.14(ns)	1.00	.29(.01)	.36(.001)	-.003(ns)	.14(ns)
NMPSS - R[a]	.34(.002)	.10(ns)	.96(.0001)	.25(.03)	.37(.001)	.007(ns)	.11(ns)
McD-P	.02(ns)	-.02(ns)	.14(ns)	.27(.02)	.29(.01)	-.07(ns)	1.00

Note: numbers in parentheses indicate significance level

[a]"normalized" MPSS - R scores

MPSS - R: Maryland Preschool Self-Concept Scale - Revised; YCSCS: Young Children's Social Desirability Scale; PPVT - R: Peabody Picture Vocabulary Test - Revised; Inferred: Inferred Self-Concept Scale (teacher report): McD-P: McDaniel-Piers Young Children's Self-Concept Scale

Table 2

Coefficient Alpha Values for Measures

Maryland Preschool Self-Concept Scale	.67
McDaniel-Piers Young Children's Self Concept Scale	
Total Scale	.85
Feeling Subscale	.76
School Subscale	.71
Behavior Subscale	.67
Inferred Self-Concept Scale	.85
Young Children's Social Desirability Scale	.91